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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/659,259	09/11/2003	Mototsugu Ono	1560-0398P	3537

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EXAMINER

CONLEY, SEAN EVERETT

ART UNIT	PAPER NUMBER
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1744

SHORTENED STATUTORY PERIOD OF RESPONSE	NOTIFICATION DATE	DELIVERY MODE
3 MONTHS	02/28/2007	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Notice of this Office communication was sent electronically on the above-indicated "Notification Date" and has a shortened statutory period for reply of 3 MONTHS from 02/28/2007.

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mailroom@bskb.com

Office Action Summary

Application No.

10/659,259

Applicant(s)

ONO, MOTOTSUGU

Examiner

Sean E. Conley

Art Unit

1744

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 December 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. The amendment filed December 12, 2006 has been received and considered for examination. Claims 1-5 are pending.

Claim Rejections - 35 USC § 103

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

3. Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fisher (U.S. Patent No. 6,003,787) in view of Dion-Biro (U.S. Patent No. 2,808,080).

Regarding claim 1, Fisher discloses an apparatus for spraying an insecticide comprising a spray gun (10) having an end nozzle (36); a chemical container (37) containing the chemical, the container being attached to the spray gun (10); a compressed gas source filled with a compressed gas; a gas hose (hose (12)) directly connected to the spray gun (10) and the compressed gas source (see figure 1; col. 3, lines 3-66; col. 4, lines 1-13). Fisher discloses that the compressed gas source can be air or other compressed gas such as gas generated from liquid carbon dioxide bottles (see col. 3, line 60 to col. 4, line 8). Liquid carbon dioxide is carbon dioxide gas that has been compressed under pressure in a tank or bottle. Therefore, the liquid carbon dioxide will become carbon dioxide gas when dispersed from the bottles so that it may

Art Unit: 1744

be used as a carrier. However, Fisher is silent with regards to specific details of the gas bottle such as a pressure reducing valve attached to the bottle.

Dion-Biro discloses an apparatus capable of spraying a sterilizing and disinfecting chemical including alcohol into a target space, comprising: a nozzle; a chemical container (reservoir (1)) containing the chemical to be sprayed and attached to the nozzle; a gas cylinder (11) filled with a compressed carbon dioxide gas; a pressure reducing valve (13) attached near an outlet of said gas cylinder (11); and a gas hose (conduit (14)) directly connected to the pressure reducing valve and a hose (3) attached to the nozzle, whereby the chemical is sprayed into the target space. Dion-Biro also discloses that carbon dioxide gas liquefies under relatively low pressure (see col. 1, lines 24-26). Dion-Biro further discloses that the above device avoids freezing of the carbon dioxide gas due to decompression in the pressure reducing valve (see figure 1; col. 1, lines 15-45; col. 2, lines 14-72; col. 3, lines 5-44). This reference has been relied upon to teach that it is well known that carbon dioxide gas is in a liquid state when under pressure and furthermore, the use of a pressure reducing valve connected to the carbon dioxide tank controls the gas release and avoids freezing of the gas.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the apparatus of Fisher and attach a pressure reducing valve to the carbon dioxide bottles in order to control the rate of decompression and also prevent freezing of the carbon dioxide gas that is released from the bottles as taught by Dion-Biro.

Regarding claim 2, Dion-Biro also discloses that the apparatus including the gas cylinder (11), pressure reducing valve (13) and gas hoses (conduit (14), hose (3)) are mounted on a common truck (carriage (C)) shared by the nozzle and chemical container (1) in order to facilitate portability (see figure 1; col. 3, lines 6-10). Therefore, it would have been obvious to modify the invention of Fisher and mount the components of the device on a carriage as taught by Dion-Biro in order to facilitate the portability of the device.

Regarding claims 3 and 4, Fisher discloses that the chemical container (37) is detachably attached to the spray gun (10) (see figure 1a; col. 3, lines 30-46).

5. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fisher in view of Dion-Biro as applied to claim 1 above, and further in view of Stonecipher (U.S. Patent No. 2,657,166).

Fisher is silent with regards to specific types of insecticides, therefore, it would have been necessary and thus obvious to look to the prior art for conventional insecticides. Stonecipher provides this conventional teaching showing that it is known in the art to use chlorinated fenchyl alcohol as an insecticide to reduce or kill houseflies (see col. 4, lines 33-60). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to make the insecticide from chlorinated fenchyl alcohol motivated by the expectation of successfully practicing the invention of Fisher.

Response to Arguments

6. Applicant's arguments, filed December 12, 2006, with respect to the rejection(s) of claim(s) 1-4 have been fully considered and are persuasive. Therefore, the rejections have been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Fisher and Dion-Biro.


Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sean E. Conley whose telephone number is 571-272-8414. The examiner can normally be reached on M-F 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gladys Corcoran can be reached on 571-272-1214. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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February 20, 2007


GLADYS JP CORCORAN
SUPERVISORY PATENT EXAMINER